

Date of Meeting: May 4, 2021

## # 7 Supplemental

**BOARD OF SUPERVISORS  
BUSINESS MEETING  
ACTION ITEM**

**SUBJECT:** Emergency Broadband Implementation Plan – Q2 2021 Update

**ELECTION DISTRICT:** Countywide

**CRITICAL ACTION DATE:** June 15, 2021

**STAFF CONTACTS:** Dave Friedrich, Information Technology  
Erin M. McLellan, County Administration

**PURPOSE:** The purpose of the item is to provide a quarterly update regarding the steps taken to facilitate the delivery of broadband solutions to underserved and unserved areas of Loudoun County.

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**UPDATE:** This supplement provides information to complement the May 4, 2021, Emergency Broadband Quarterly Update. Below are additional project details such as mapping, and Communications Commission's Request for Expressions of Interest (RFEI) response.

Based on Staff's review of all submitted proposals, and after consultation with the Communications Commission and state level Virginia Telecommunications Initiative (VATI) administrators, the recommendation is that the County proceed with establishing a Memorandum of Agreement (MOA) with All Points Broadband as a VATI partner.

Because one of the requirements of VATI is that submissions not overlap by more than 25% with existing franchisee(s) service areas and should not compete with another sponsored application in the same jurisdiction, staff believes that the County should pursue only one of the proposals submitted. Based on the information staff has at this point, APB presents the largest potential service area and brings a track record of successful VATI applications.

At this time staff will be proceeding with an MOA with APB to partner on a VATI application. No action is needed from the Board at this time.

In addition to information included in the main item distributed in the May 4, 2021 packet, staff evaluated the following information in making this determination.

## **BACKGROUND ON RFEI RESPONDENTS**

VATI offers the opportunity to submit multiple grant submissions as a means to maximize broadband coverage project area(s). To identify potential complementary respondents, for either a joint or non-competing submission, Staff requested maps to allow the Office of Mapping and Geographic Information (OMAGI), an opportunity to overlay with previously developed broadband desert areas. These maps are provided below along with high-level key project points for each submission staff considered. Through this information below, Staff are unable to identify two completely different coverage opportunities for a joint or second, non-competing FY 22 submission. Staff believes the best option for the County is a coverage solution that will maximize service to as many residents as possible.

Staff consulted the Communications Commission regarding its assessment and feedback on the RFEI proposals received. Through the Chair of the Commission, staff received the following feedback:

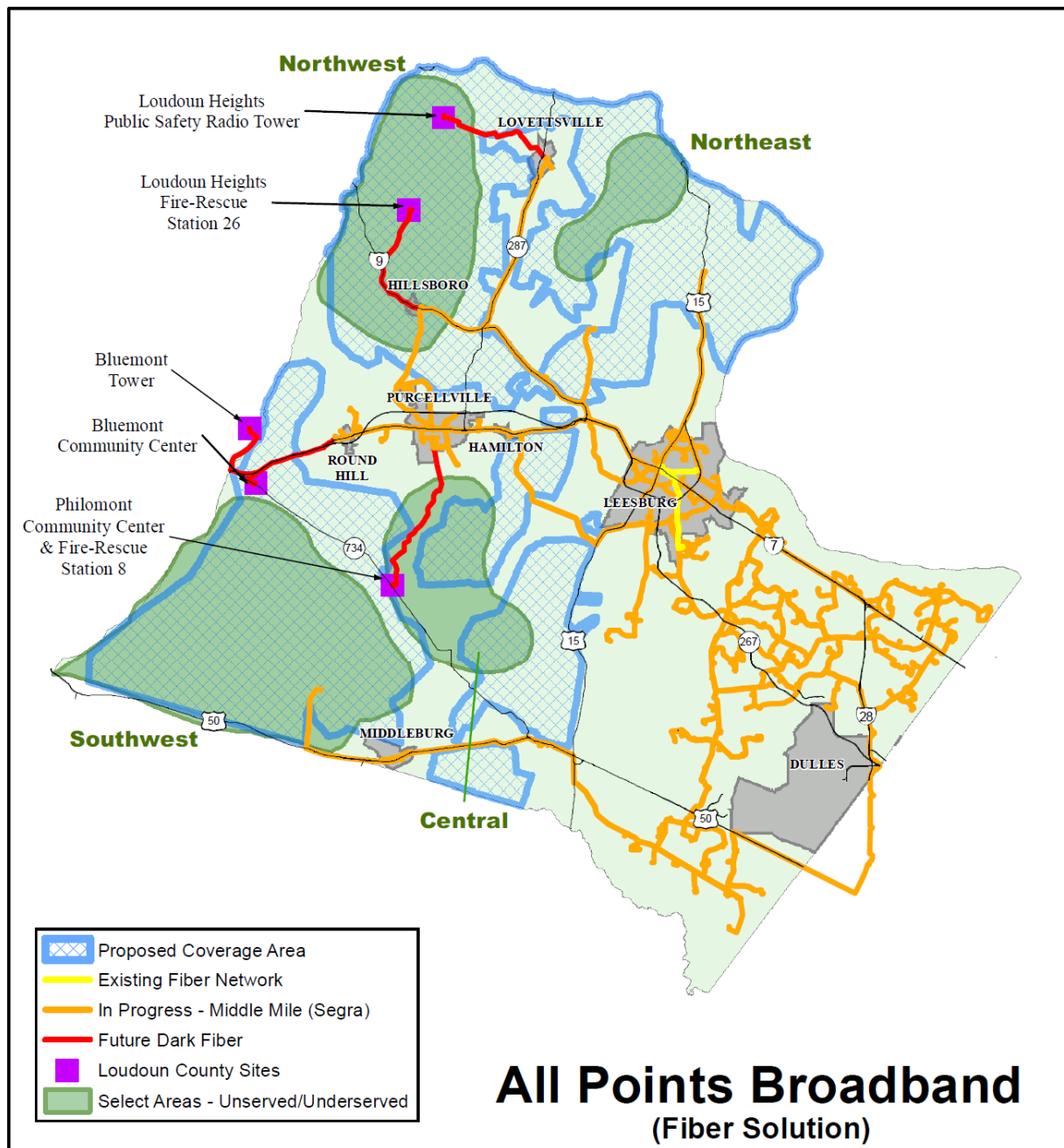
- The County could consider using All Points Broadband (APB) as a primary fiber proposal and T-Mobile as a secondary proposal, if staff determines that this would be possible without conflict and staying within the approved 25% overlap allowance by VATI.
- Of the fiber solutions, the APB proposal provided the broadest service area consistent with the County's identified areas of broadband under or unserved.
  - Other Fiber to the Home (FTTH) solutions offered were not as desirable due to more limited-service project areas.
- It would be preferable if any wireless proposals were supported by a verified partnership with a tower provider.
- Wireless gaps within the County are still an issue that should not be overlooked and there is potential that a wireless/tower partnership potentially saves the County from investing taxpayer dollars.
- The Communications Commission shared the following risks with the top proposals for staff consideration and management:
  - The County should not consider a partner that requires exclusivity, whether with the towers or fiber that is procured or installed, as this is not in the best interest of the County or commercially reasonable competition.
  - Additional capacity should be made available to other last mile solutions in the future.
  - Exclusivity of Rights of Way should not be considered acceptable.
- If allowable, the Commission raised the feasibility of both a wired and wireless solution offered to the County and given the deadline to pursue both All Points Broadband and T-Mobile in parallel.

## **Proposals Evaluated by Staff**

- **All Points Broadband**

All Points Broadband (APB) has identified approximately 8,200 currently unwired locations across all four areas identified in the RFEI, for inclusion in the proposed project. The County's Phase 2 Dark Fiber project is expected to assist in APBs efforts to reach portions of these locations.

- Proposed coverage: ~ 153,000 acres, ~240 square miles
- Upload/Download speeds of 50/50 Mbps, 100/100 Mbps and 1/1 Gbps, with no data caps.
- Forecasting substantial project completion will be achieved in 18 months from VATI award (VATI will grant extensions).
- Service Credits (when or if the service does not meet the expected service level of 99.95% uptime the County would receive a credit for charges): If this service feature is required to serve a County location, then APB will comply with all County requirements.
- All required partnerships (Dominion Electric & NOVEC) are in place.
- APB and its partners expect to seek no more than 50% of total project cost and will lead the VATI application process.
- APB has been successful in other VATI & Rural Digital Opportunity Fund (RDOF) grant applications (Northern Neck Initiative - ~7,000 residents with a solution 95% Fiber to the Home (FTTH) and 5% Fixed Wireless.)



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## RFI for Broadband Interest in Loudoun County

Map Number: 2021-189

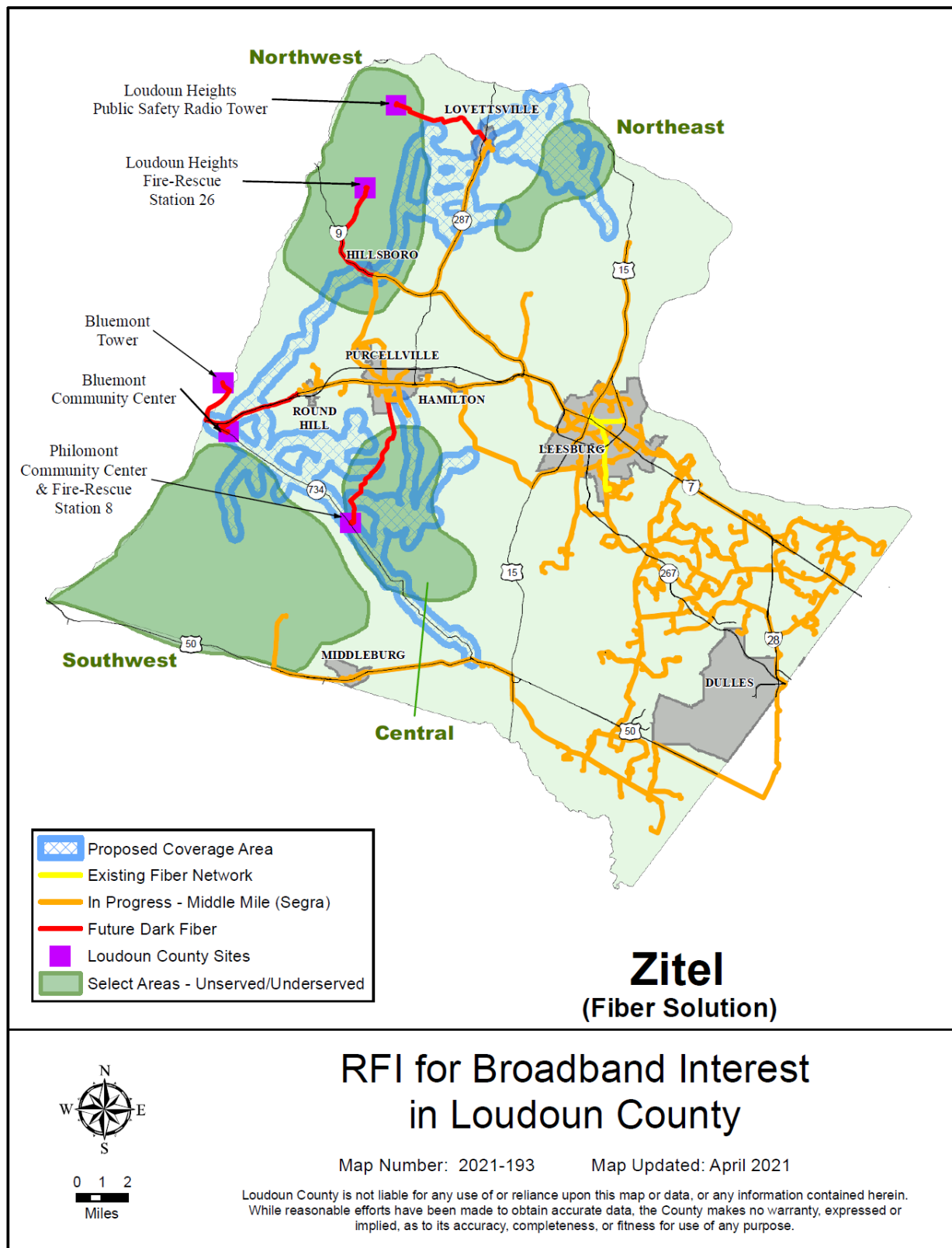
Map Updated: April 2021

Loudoun County is not liable for any use of or reliance upon this map or data, or any information contained herein. While reasonable efforts have been made to obtain accurate data, the County makes no warranty, expressed or implied, as to its accuracy, completeness, or fitness for use of any purpose.

- **ZiTel**

ZiTel has identified approximately 4,200 locations across portions of all four areas identified in the RFEI, for inclusion in the proposed project. The proposal is less inclusive, and some of the proposed locations may overlap existing Franchisees. The County's Phase 2 Dark Fiber project is expected to assist in ZiTel's efforts to reach portions of these locations. ***Staff are unable to discern any served areas that would not be a part of the APB proposal.***

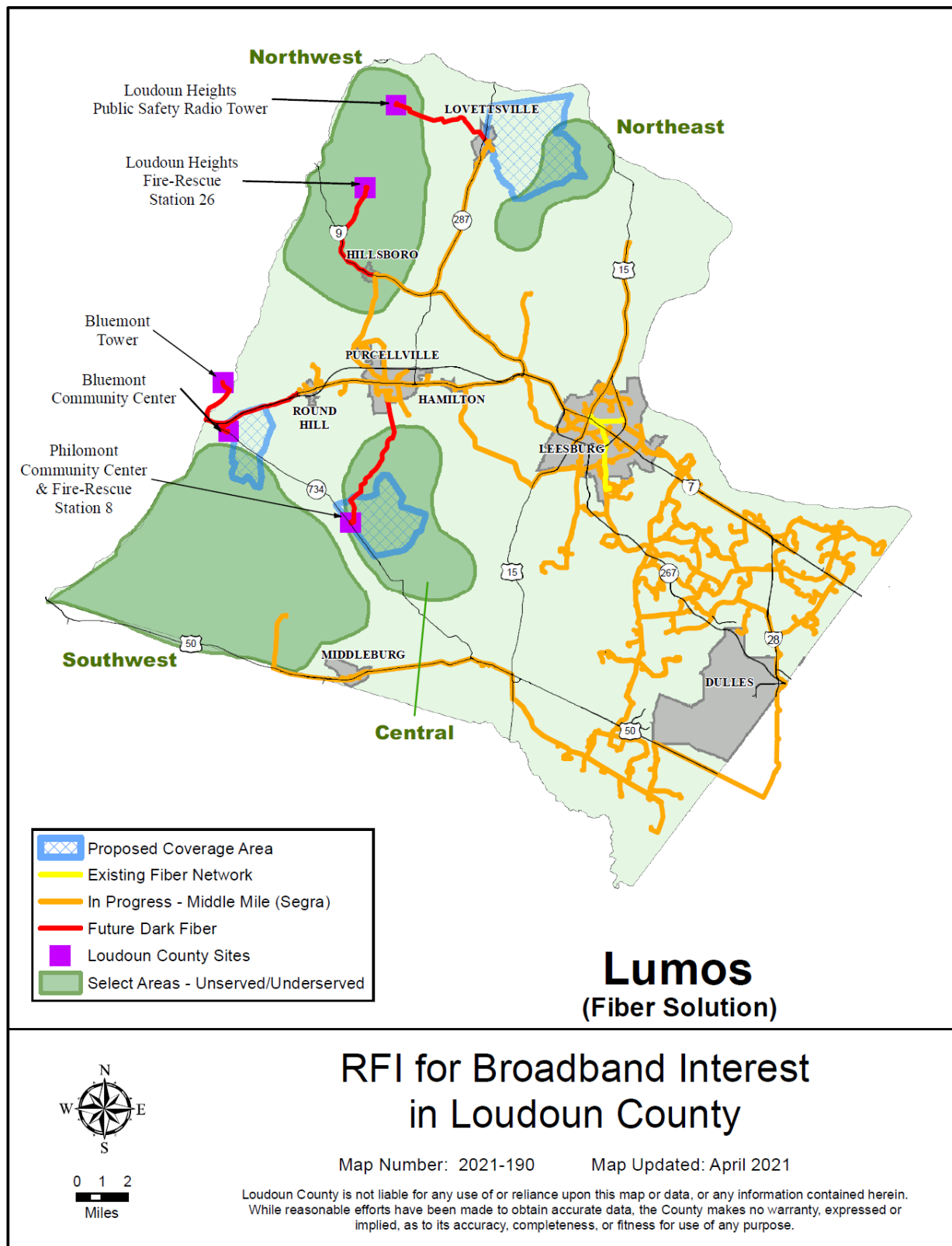
- Proposed coverage area: ~35,000 acres, ~55 square miles
- All locations will have access to ZiTEL's Fiber Gigabit service, download/upload 1 Gbs (1000 Mbps)
- Forecasting project completion within 18 months.
- Service Credits (when or if the Service does not meet the expected Service Level of 99.95% uptime the County would receive a credit for charges): This is not part of their current model but are open to negotiations on this for certain customer levels or service levels.
- Required partnerships are not currently in place and would need to be negotiated.
- ZiTel will provide 20% funding for VATI process.



- **Lumos**

Lumos has identified approximately 450 currently unwired locations across portions of the three of the four areas identified in the RFEI, for inclusion in the proposed project. The County's Phase 2 Dark Fiber project is expected to assist in their efforts to reach portions of these locations. ***Staff are unable to discern any served areas that would not be a part of the ZiTel or APB proposals.***

- Proposed coverage area: ~ 13,000 acres, ~ 20 square miles
- Four speeds are offered: 100 Mbps Download/100 Mbps Upload, 200 Mbps Download/200 Mbps Upload, 500 Mbps Download/500 Mbps Upload and 1000 Mbps Download/1000 Mbps Upload.
- Forecasting project completion within 18 months.
- Service Credits (when or if the service does not meet the expected service level of 99.95% uptime the County would receive a credit for charges).
- Willing to contribute 60-70% of the funding for VATI grant.

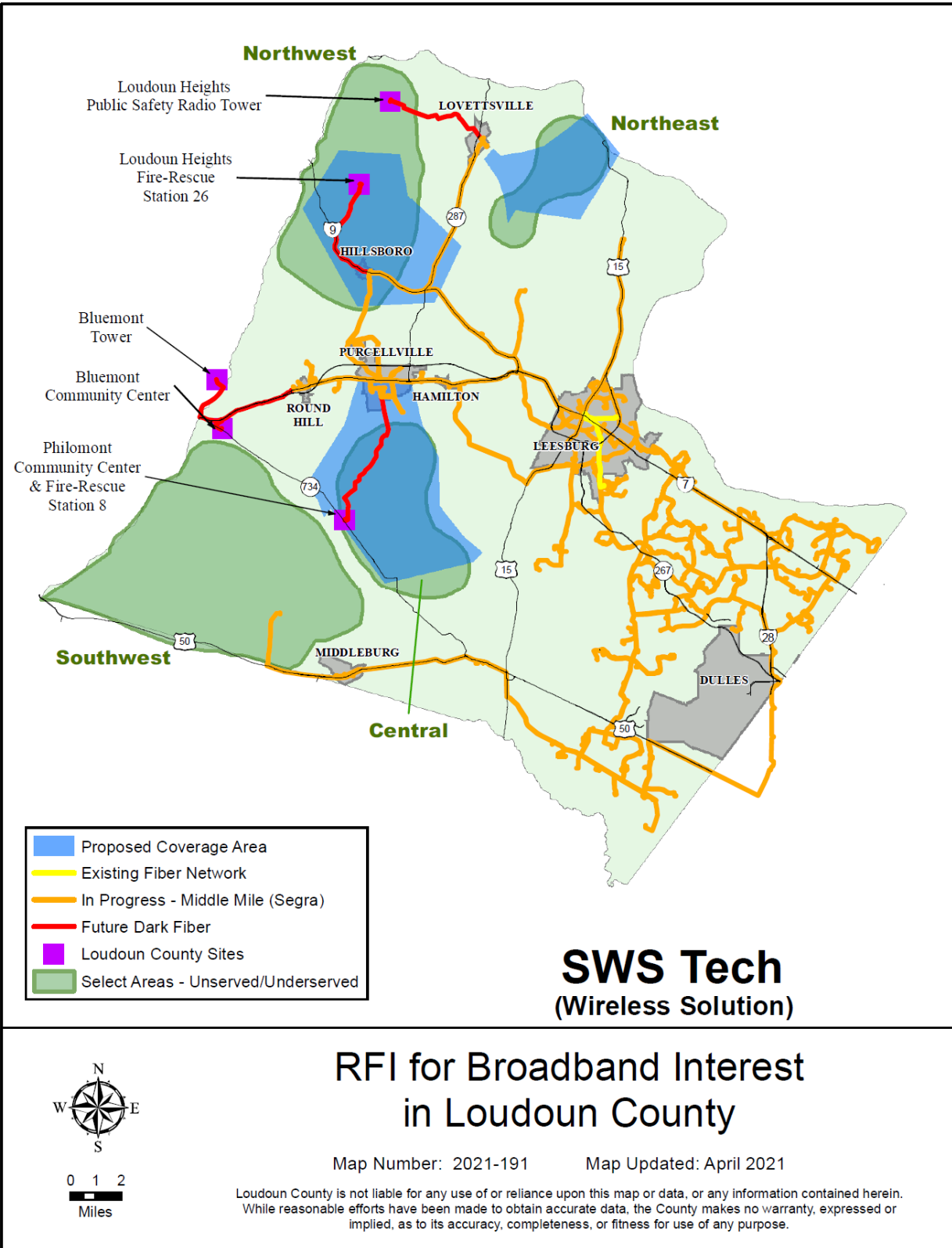




- **SWS Tech**

SWS Tech has identified approximately 2,500 locations across portions in three of the four areas identified in the RFEI, for inclusion in the proposed project. The County's Phase 2 Dark Fiber project is expected to assist in their efforts to reach portions of these locations. ***While providing a wireless offering, staff are unable to discern any served areas that would not be part of the T-Mobile proposal.***

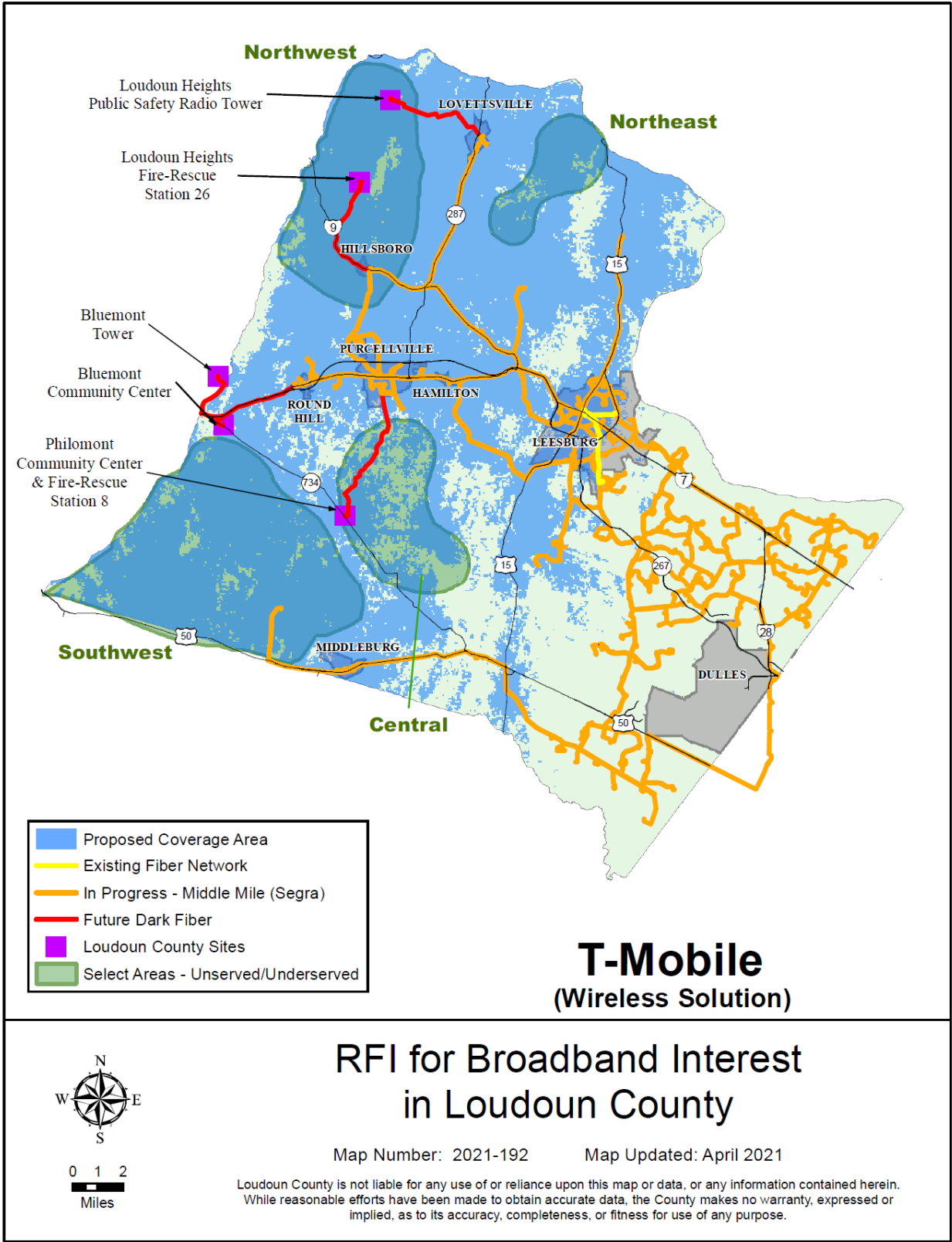
- Proposed coverage area ~35,000 acres, ~55 square miles
- Plan to provide 100% of the areas proposed with a minimum of 25/25 MBPS.
- Forecasting project completion within 18 months.
- Service credits (when or if the service does not meet the expected service level of 99.95% uptime the County would receive a credit for charges).
- Will comply with County requirements.
- Providing 20% of the necessary funding for VATI grant completion.



- **T-Mobile**

T-Mobile has identified approximately 10,000+ locations across all four areas identified in the RFEI, for inclusion in the proposed project. The County's Phase 2 Dark Fiber project is expected to assist in their efforts to reach portions of these locations.

- Proposed coverage area: ~ 200,000 acres, ~ 310 square miles
- 5G: Download speeds: Typically, between 38/111 Mbps. Upload speeds: between 10 / 34 Mbps.
- 4G LTE: Download speeds: Typically, between 9 / 47 Mbps. Upload speeds: Typically, between 4 / 20 Mbps.
- Estimated project timeline would be 12 to 18 months post contract award.
- Service credits (when or if the Service does not meet the expected Service Level of 99.95% uptime the County would receive a credit for charges). T-Mobile does not agree to service level guarantees or service level agreements (SLAs) with penalties for non-compliance with such SLAs. This would need to be continuing discussion with T-Mobile.
- Will commit up to 20% of the VATI grant project costs.



## **SECTION 2: AMERICAN RESCUE PLAN & BROADBAND EXPANSION**

Staff regularly receives Broadband Service Requests for assistance from residents to analyze and interpret density requirements. These cases often lead to Staff working directly with the County's two Franchisees on behalf of residents to obtain budgetary construction costs, as these projects require resident contributions to extend cable TV service.

A potential opportunity exists through American Rescue Plan Act (ARPA) funding, which considers broadband an eligible expense, for the County to consider offsetting part, or all, of selected individual projects.

Until guidance is received from the United States' Treasury Department on full use of those funds, there is uncertainty whether parameters will be developed around how funds can exactly be spent. Given this current state, DIT staff will be partnering with the Department of Finance and Budget to initiate a future item addressing the potential of using ARPA funding for broadband related expenditures. At that time, staff envisions providing recommendations for both near and long-term broadband opportunities including potential criteria for applying these funds.